

Welcome to Cardiac Rehab

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Nursing Session Outline

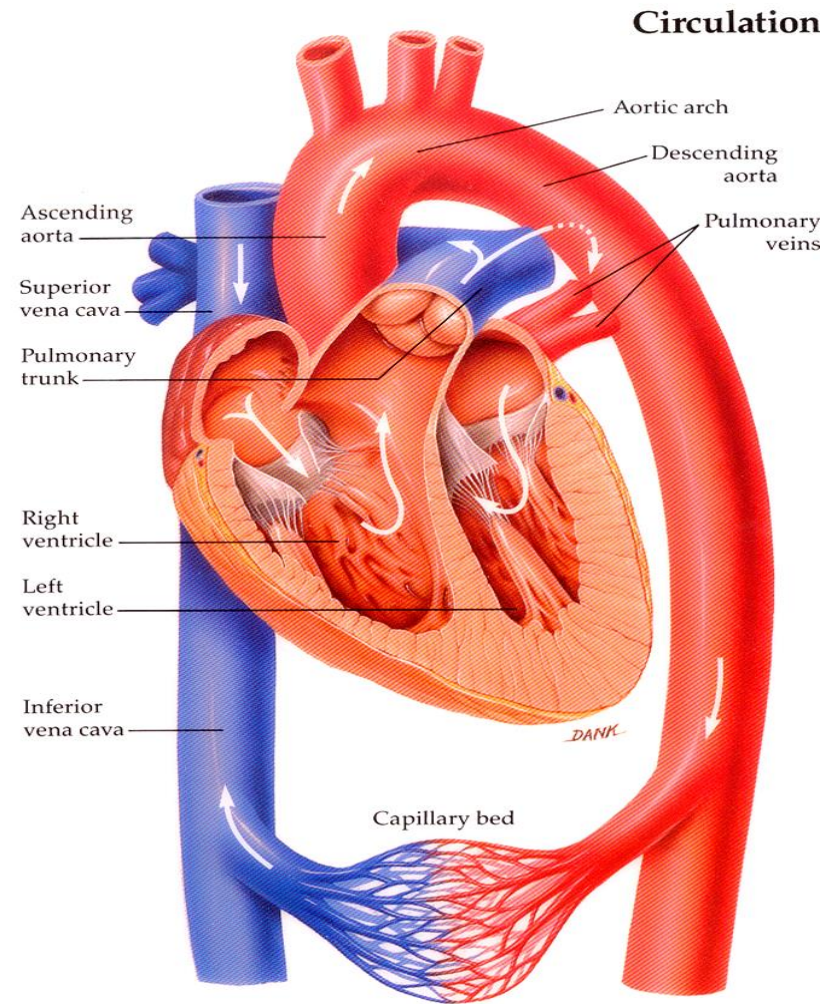
- Your heart and how it works
- Common heart problems and how they are treated
- Managing your risk factors for prevention
- Medications

Your Heart

The heart is a muscle...

The heart is a pump...

...a pump with a big job to do!



Heart Problems

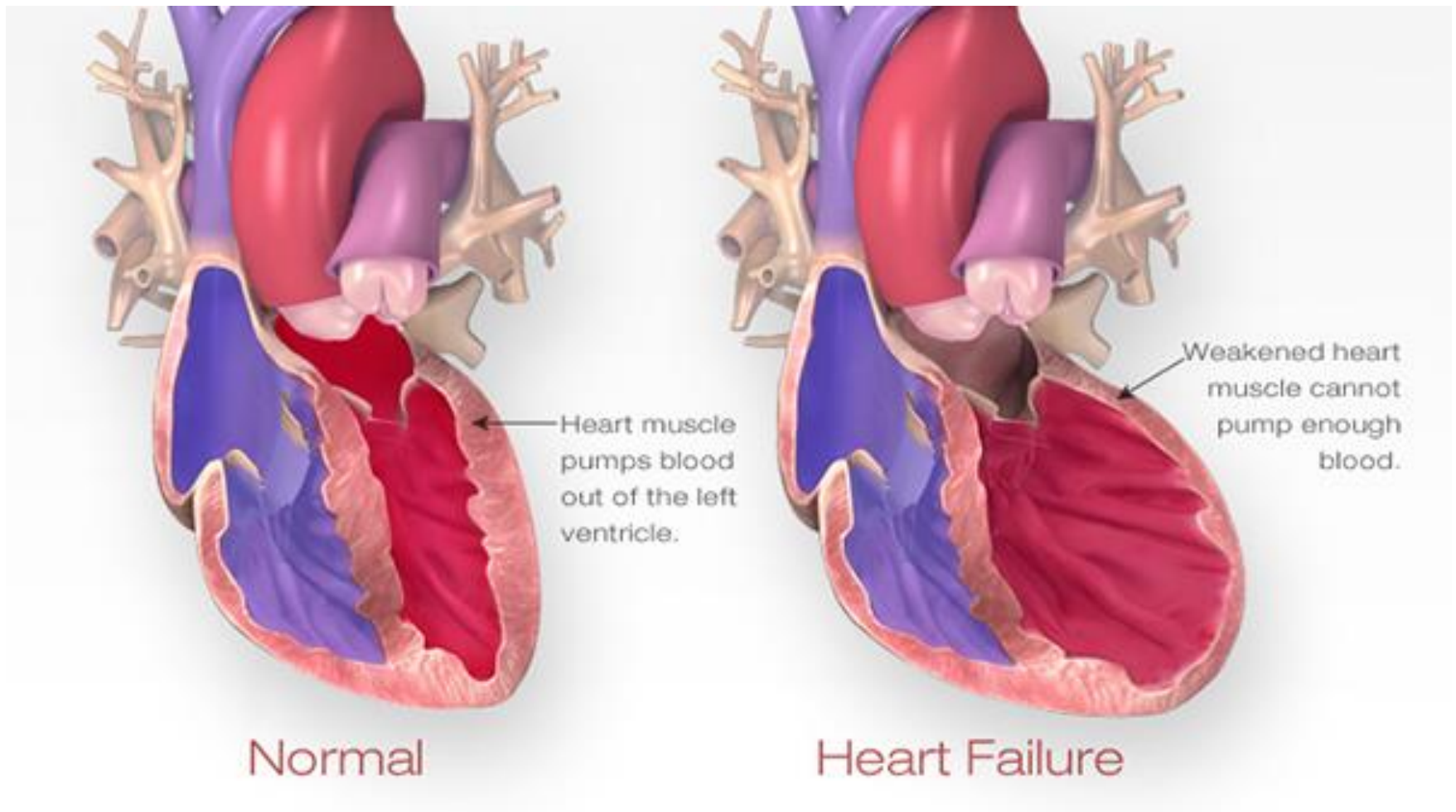
Common problems

- coronary artery disease (angina vs heart attack)
- valve disease
- irregular heart rhythms

Less common problems

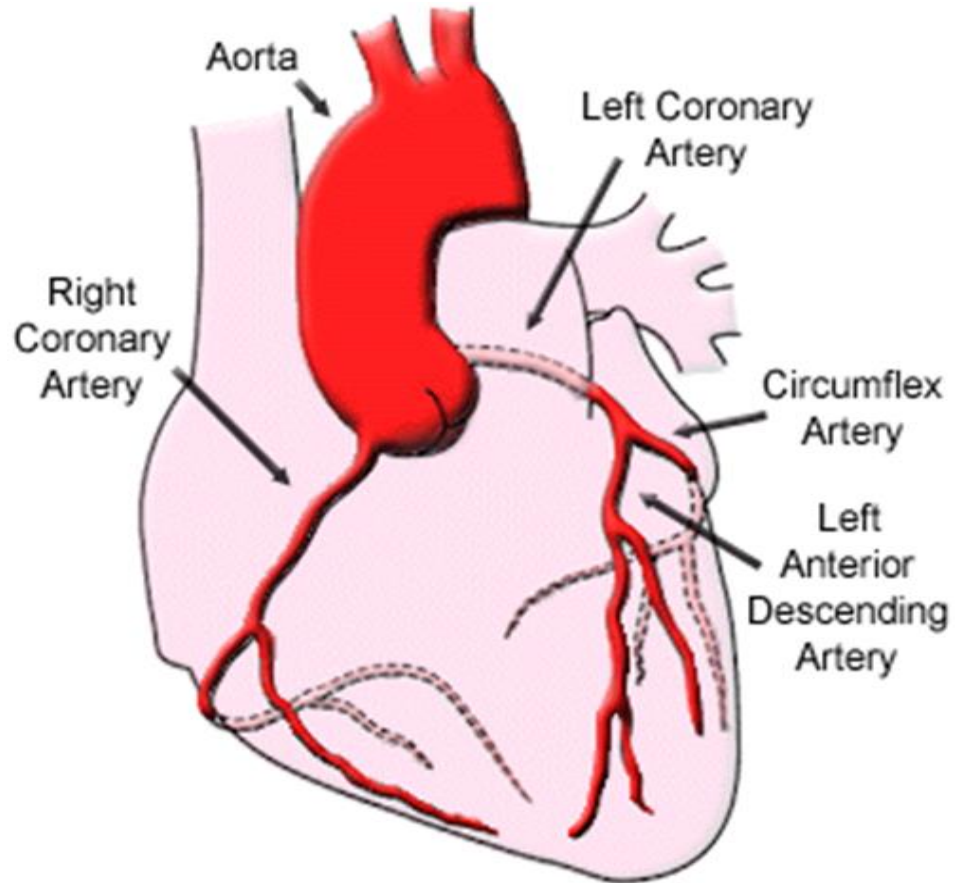
- aortic arch irregularities
- electrical conduction problems

All heart problems lead to...



Coronary Arteries

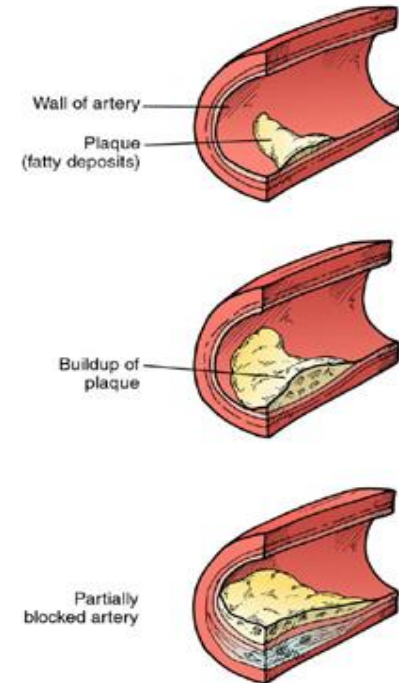
The heart has its own arteries to feed the heart muscle.



Coronary Artery Disease...

...arteries that supply oxygen-rich blood become narrowed or blocked by fatty deposits/plaque

Plaque Buildup in Arteries



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What is Angina?

...blood can't flow freely through your arteries when plaque builds up....

Angina is a symptom

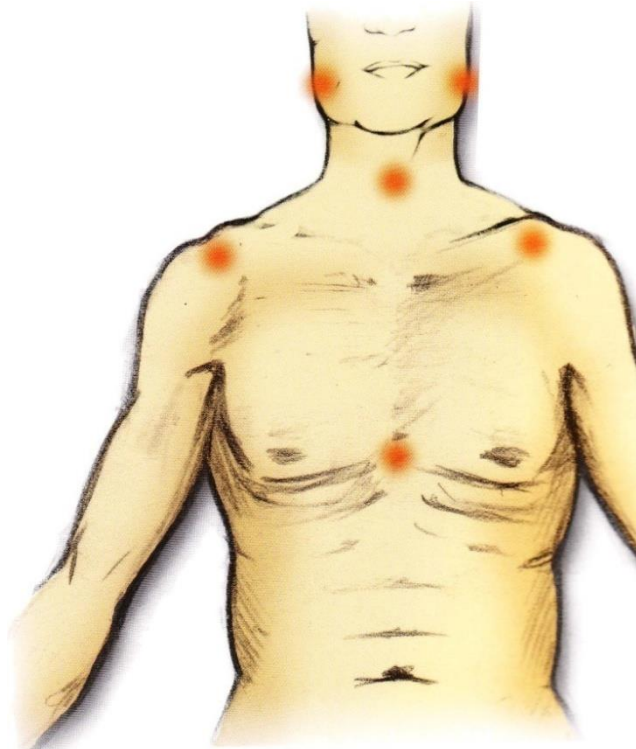
squeezing-

pressure-

tightness-

burning-

nausea-



-shortness of breath

-banding sensation

-chest heaviness

-toothache

Angina in Women

Symptoms can be different for women:

- Nausea
- Fatigue
- Shortness of breath
- Shoulder pain

Symptoms are often ignored....

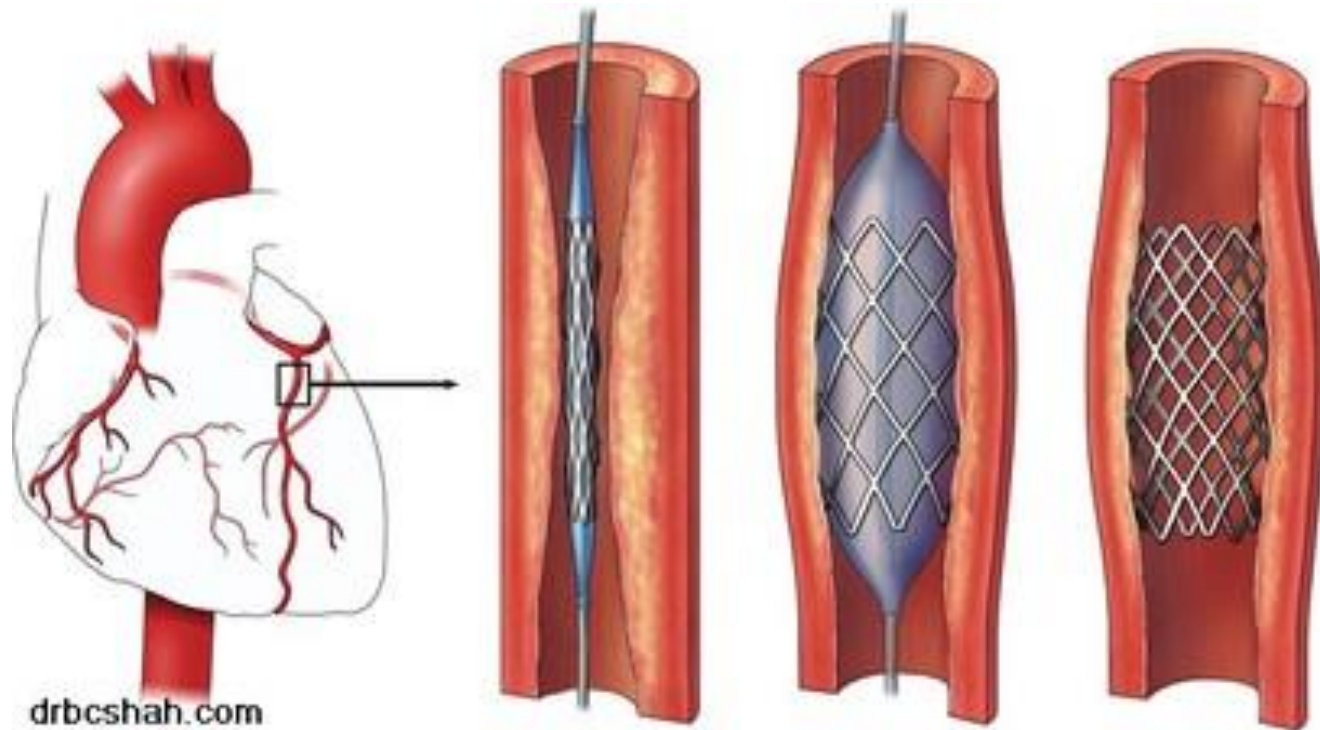
....Know what to report to the Doctor

Angina vs. Heart Attack

- Angina
 - Lack of oxygen to cells causing pain
 - No muscle cell damage
- Heart attack
 - No oxygen to cells causing muscle cell death

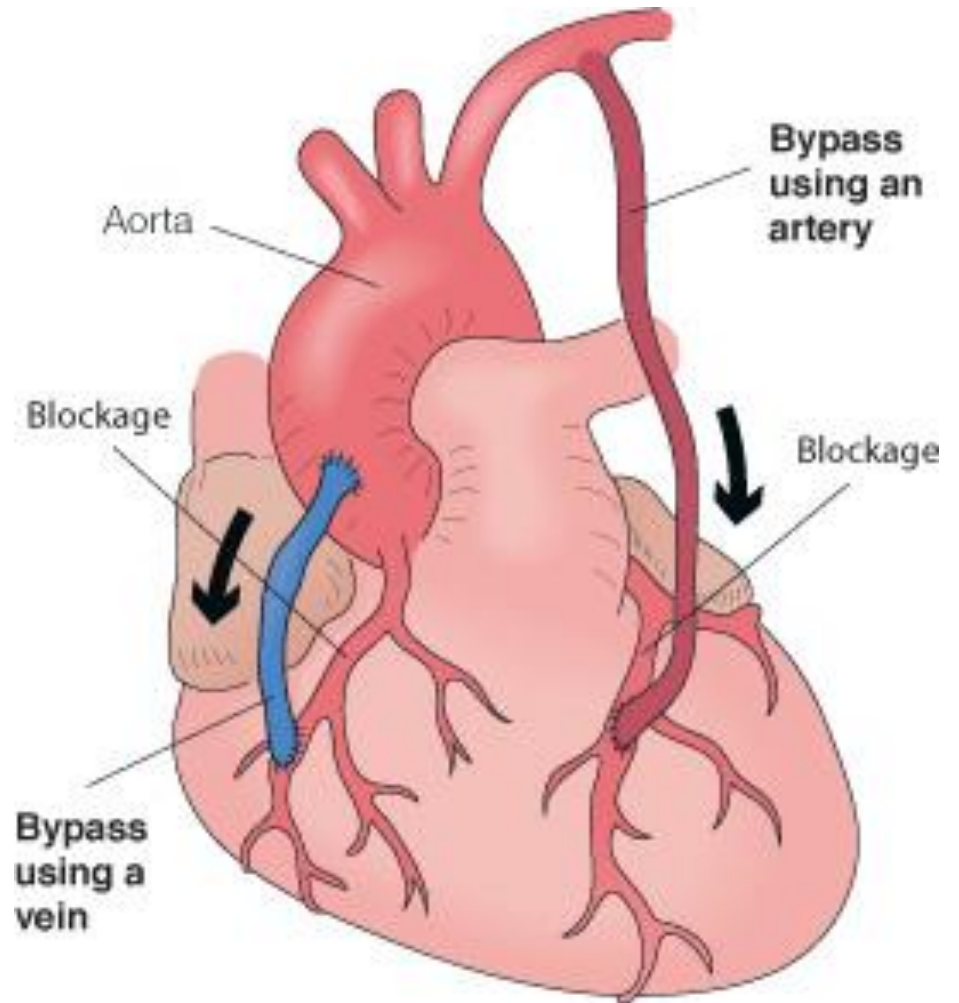
Treatment for CAD

Coronary artery stent



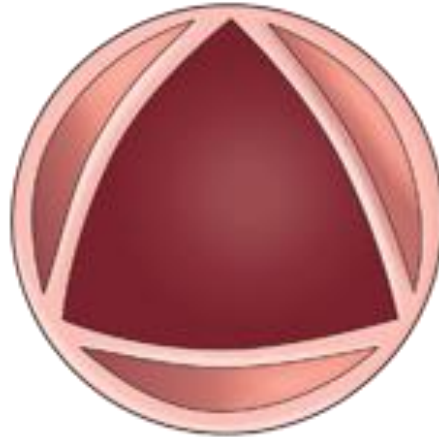
Treatment for CAD

Coronary artery
bypass graft

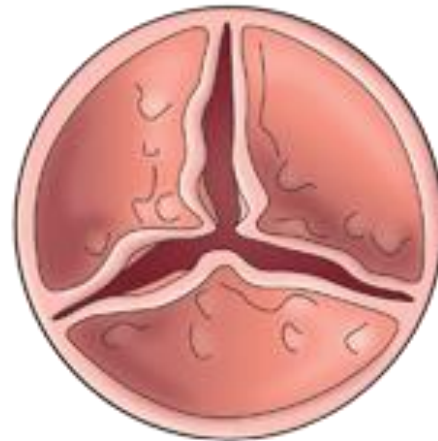
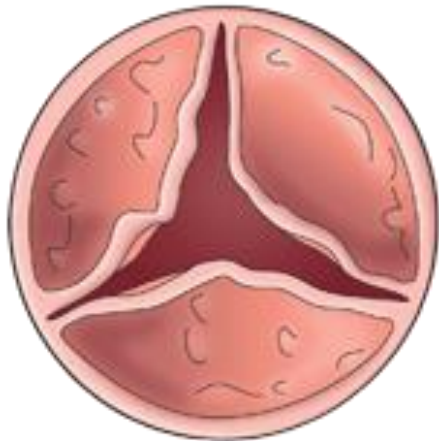


Valve disease

**normal
aortic
valve**



**aortic
valve
stenosis**



© Allina Health System

open

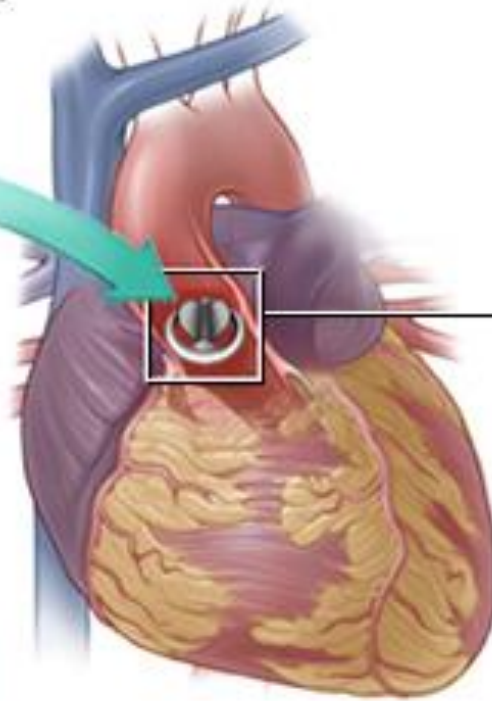
closed

Valve Replacement Surgery

Mechanical valve



Tissue valve

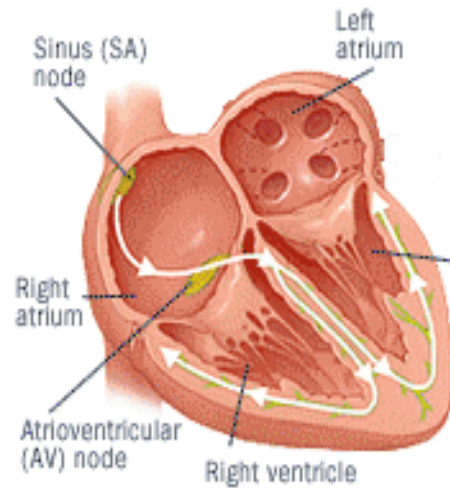


Artificial valve
is sewn in place

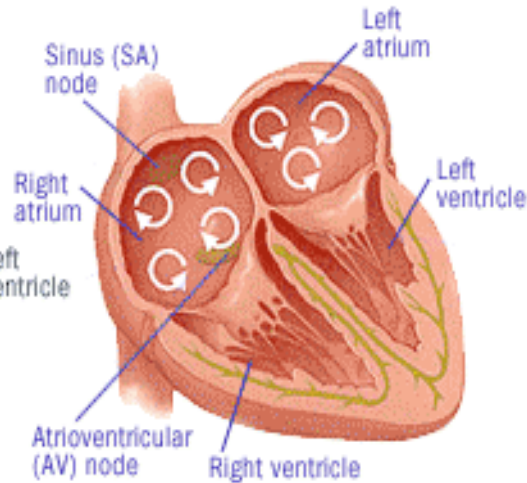
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Irregular Heart Rhythms

Normal heart rhythm



AFib (atrial fibrillation)



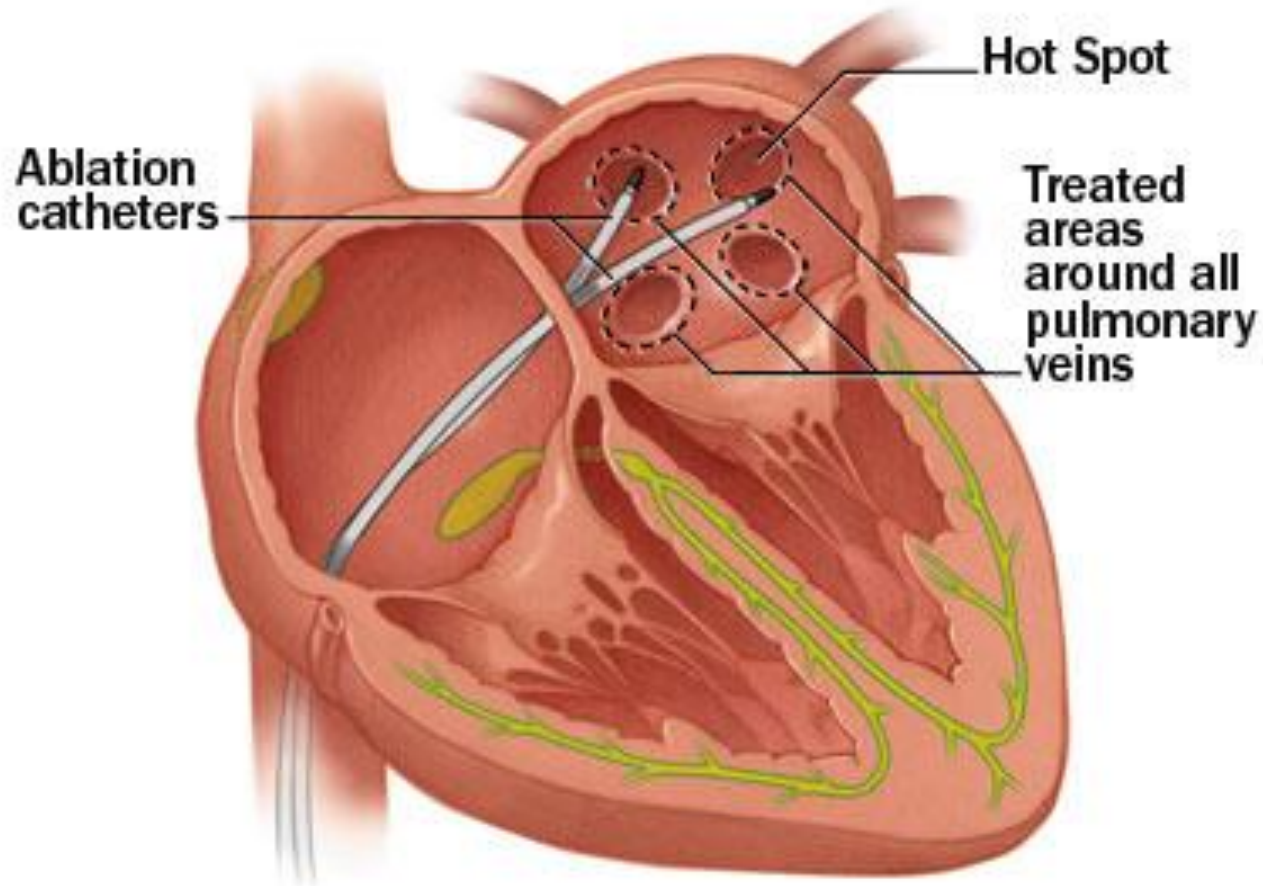
Normal heart rhythm



AFib

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Ablation Surgery



Risk Factors

Risk factors we can change

- high blood pressure
- diabetes
- smoking
- stress
- excess body fat
- unhealthy cholesterol levels
- alcohol intake
- inactivity

Risk Factors

Risk factors we cannot change

- Age
- Gender
- Family History



- You are more likely to develop heart disease if your parents had it themselves and particularly if before age 55 (premature heart disease).

High Blood Pressure

- blood pressure that goes up and stays up on several occasions **greater than 140/90**
- usually no symptoms or early warning signs until damage is already done to the body

“The Silent Factor”

- heart works harder, increases blood pressure which damages blood vessels

Know your numbers!

Pre-Diabetes

Pre-Diabetes = being at risk of diabetes

- Normal Range: 4.0- 6.0
- Pre-Diabetes: 6.1- 6.9
- Diabetes: >7.0 (2 tests - Fasting)

There are things you can do to prevent diabetes
or delay its onset!

Diabetes

- Type 2 Diabetes
 - no known single cause
 - body loses ability to convert blood sugar into energy
 - energy cannot get into cells
 - leads to a build up of sugar in the blood

Diabetes

Safe Exercise Range

- bring Glucometer to all exercise classes
- self test and record
 - Pre Exercise: < 14
 - Post Exercise: > 4
- tracking blood sugars helps you know how lifestyle choices you make affect your diabetes



Smoking

- affects your heart health
- addictive

- smoking cessation program
- support at cardiac rehab

The single most important thing you can do is to QUIT!

Benefits of Quitting

Within 20 minutes:

Blood pressure and heart rate return to normal

Within 8 hours:

Poison levels (CO) in blood drop to normal

Within 24 hours:

Risk of heart attack reduces

It's never too late to ask for help to quit!

Stress – Emotional Response

Normal stages associated with your cardiac crisis

- Shock
- Denial
- Anger
- Depression
- Bargaining
- Acceptance

Stress – Physical Response

Fight or Flight

1. Hormones and glucose (sugar) released into bloodstream...
2. Can affect blood pressure, heart rate and blood flow...
3. Can increase risk of irregular heart beat and blood clots.

**Long term stress
can damage lining of arteries**

Depression

- Affects your immune system
- Affects your energy level
- Makes it difficult to change your health behaviours
- Avoid getting stuck in denial about depression

Depression

- Acknowledge your feelings
- Share your feelings with someone
- Know it is OK to seek help now during your cardiac rehabilitation

- Complete HAD survey and it will help us to identify if you are depressed
- Referral to counselling, as needed

Other Risk Factors

Excess body fat

Unhealthy cholesterol

Unhealthy diet

These risk factors will be assessed during your individual appointment with the registered dietitian.

Inactivity

The registered kinesiologist will discuss your activity-related risk factors including being sedentary.

Medications

- Know your meds and why you are taking them!
....WHY?
- Mistakes can happen
- 2-4% ER patients have experienced issues with their prescriptions
- Studies show that people over 60 years take an average of 5 medications

It's more than a list...

Top Tips to manage your meds:

1. Know name and strength of medication.
2. How often you take it?
3. Why? What is it doing?
4. How long should you take it?

Taking ownership...

1. Have a list and show your doctor and your team at cardiac rehab.
2. At least once/year, “brown bag it”!
3. Use the same pharmacy
4. Talk to your pharmacist → your medication specialist
5. Talk to your doctor when “0” repeats

Main Cardiac Medications

- Aspirin (ASA) and Anti-clotting
 - prevents clotting and thins blood
- Beta blockers
 - lowers blood pressure
- ACE inhibitors
 - protects kidney
- Statins
 - lowers blood cholesterol
- Nitroglycerin
 - opens blood vessels

→ REVIEW YOUR RESOURCE SHEET

Summary



Self managing your risk factors is key!

Program works when you work the program!

**Prevention of another cardiac event is a
lifelong goal!**